

PHAGE-DEPENDENT SUPER-PRODUCTION OF BIOLOGICALLY ACTIVE PROTEIN AND PEPTIDES

Abstract of the Disclosure

5 This invention relates to a method for enhancing the production of biologically
active proteins and peptides in bacterial cells by infecting bacterial cells of the producer
strain, which contain a plasmid with one or more targeted genes, with bacteriophage λ
with or without the targeted gene(s). The phage increases synthesis of the targeted
protein and induces lysis of the producer strain cells. Super-production is achieved by
10 cultivating the producer strain cells under culture conditions that delay lytic
development of the phage. The biologically active proteins and peptides subsequently
accumulate in a soluble form in the culture medium as the cells of the producer strain
are lysed by the phage.

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